

**DETAILED ACTION**

***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 6/25/08 has been considered. A copy of form PTO-1449 is attached.

***Drawings***

3. The drawings are objected to because there are two figures 3 and the "text" in first figure 3 is not in English. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either

"Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Objections***

4. Claims 6-13, 16-18, 23, and 26 are objected to because of the following informalities: The terms "and further" should be changed to --further--. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 8-10, 12-17, 20-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. Claim 8, line 2, has no antecedent basis for "the sample holder".

b. Claim 8, line 3, has no antecedent basis for "the opposite side".

c. Claim 9 is vague and indefinite because there is no connection between the components of claim 1 with the diffuser unit of claim 9. For example, how the diffuser unit is arranged to provide a diffused light.

- d. Claim 10, line 2, there is no connection between "detector means" and the components of claim 1.
- e. Claims 12-13 recite "a sight glass". However, it is not clear how the "sight glass" connected with claim 1.
- f. Claim 14, lines 2-3, there is no antecedent basis for "the distance", "the detector means" and "the measuring surface".
- g. Claim 15, line 2, the phrase "the sight glass is coated" is not clear. Coated with what does applicant means here?
- h. Claim 16, line 3, the linking terms "preferably" is considered indefinite since the resulting claim does not clearly set for the metes and bounds of the patent protections desired. Also, it is not clear how the "rinsing nozzle" is connected with claim 1.
- i. Claim 17 is not clear how the "nose" is connected with the components of claims 1 and 11.
- j. Claim 19, line 2, the terms "may be" do not provide a positive limitation.
- k. Claim 20, there is no connection between the "temporary storage", "a valve" and the components of claim 1 and 18.
- l. Claim 21 has no antecedent basis for "the measuring housing".
- m. Claim 22 is not clear how the "controller" relates to the components of claim 1.
- n. Claim 23 is not clear how the "partition wall" arranges in the housing of claim 1.
- o. Claim 24, line 2 is not clear, conveying of what does applicant means here? what does applicant means by "recognition rule"?

p. Claims 25-26 are dependent on claim 24, thus inherit the deficiency of claim 24.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 4, 5, 7, 10, 18 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Redetzky (DE-10131781) (of record).

Regarding claim 1, Redetzky discloses a device for recognizing particles in milk comprising: a measuring surface (5) and housing (11); wherein the measuring surface receives milk and has a specific surface roughness (see [0117] and [0118] of the applicant's translation and figure 1).

Regarding claim 4, as seen from figure 1, the surface (34) is inclined at zero degree.

Regarding claim 5, see applicant's translate, page 4, paragraph [0066] for hydrophilic layer.

Regarding claims 7 and 18, storage for storing liquid sample is inherent in the device of Holm before it passes through the collector.

Regarding claim 10, see figure 1 for the detectors (8, 9).

Regarding claim 22, see controller (10) in figure 1.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 2-3, 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Redetzky.

Regarding claims 2-3, Redetzky does not explicitly that the peak to valley height is at least 10 microns and has a value of 27-30 according to VDI 3400, edition 175-06. However, it would have been matter of design choice to choose the surface roughness having peak to valley height at least 10 microns and the measuring surface has a value of 27 to 30 according to VDI 3400, edition 175-06 whichever suitable for the device.

Regarding claim 8, it would have been obvious to one having ordinary skill in the art at the time the invention was made to arrange the light sources and detectors so that at least two opposite illuminations unit which light the sample holder at such an angle that the focus of the light beams is incident on the opposite side of the measuring surface because it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Regarding claim 9, using a diffuser in front of a light source is well known in the art. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include on Redetzky at least one diffuser unit. The rationale for

this modification would have arisen from the fact that using such diffuser would increase the uniformity of the light beam, thus accuracy of the measurement is obtained.

11. Claims 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Redetzky in view of Sunshine et al (2006/0055934).

Regarding claims 24-26, Redetzky does not explicitly teach the use of a camera for determining at least two types of particles; however, such a feature is known in the art as taught by Sunshine et al. Sunshine et al, from the same field of endeavor, teaches that camera (6) is used to capture an image of the measuring surface and employing at least one object recognition rule to distinguish at least two types of the particles (see figure 1 and paragraph [0011]. It would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the detector of Redetzky by a camera taught by Sunshine et al if different types of particles are determined.

#### ***Allowable Subject Matter***

12. Claims 6, 11-17, 19-21 and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Following references relate to particles detection device: Carty et al (7,446,869) and Wiethoff et al (2007/0289364).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HOA Q. PHAM whose telephone number is (571)272-2426. The examiner can normally be reached on Monday through Friday, 7:00 AM TO 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tarifur Chowdhury can be reached on (571) 272-2287. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hoa Q. Pham/

Application/Control Number: 10/592,917  
Art Unit: 2886

Page 9

Primary Examiner  
Art Unit 2886

HP  
April 1, 2010